

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF WEST VIRGINIA

WALHONDE TOOLS, INC.,

Plaintiff,

v.

// CIVIL ACTION NO. 1:09CV48
(Judge Keeley)

WILSON WORKS, INC., a West Virginia
Corporation, NORTHCO CORP., a West
Virginia Corporation, NAES POWER
CONTRACTORS, INC., a succeccor by
merger to American Boiler & Chimney
Company, a Washington Corp., MINNOTTE
CONTRACTING CORPORATION, a Pennsylvania
Corporation, FOSTER WHEELER ZACK, INC.,
a Delaware Corporation,

Defendants,

MEMORANDUM OPINION AND ORDER CONSTRUING PATENT CLAIMS

On October 15, 2010, the Court convened a hearing on the parties' proposed constructions of the claims of the patent-in-suit, following which it ordered the parties to submit supplemental briefs addressing specific issues of claim construction. After considering the arguments and evidence of the parties, and pursuant to Markman v. Westview Instruments, Inc., 52 F.3d 967 (Fed. Cir. 1995), the Court **CONSTRUES** the relevant claims of U. S. Patent 4,936,500 ("`500 Patent" or "patent-in-suit") as set forth in this Order.

I. CASE BACKGROUND

The plaintiff, Walhonde Tools, Inc. ("Walhonde"), filed this action under the patent laws of the United States, 35 U.S.C. § 101

MEMORANDUM OPINION AND ORDER CONSTRUING PATENT CLAIMS

et seq., alleging that the defendants had infringed the '500 Patent (entitled "Bolt-Type Boiler Wall Tube Tool").¹

The patent-in-suit describes a device utilized in the construction of steam boilers, such as those used to generate electricity or heat. Boilers are generally composed of a series of parallel pipes or tubes through which water passes as it is converted into steam. Because the tubes can be lengthy and are arranged in a closely spaced "wall," or bank of pipes, assembling the tubes by welding can present logistical difficulties.

Walhonde's devices, including the invention at issue in this case, address that problem by allowing a welder or boilermaker to temporarily clamp sections of tubing together, end to end, so that the abutting ends may be tack-welded (secured with a small, temporary weld). The clamp is then removed to enable the welder to completely close the circumference of the joint.

Such a device, generally, is not novel. Previous patents have been issued for inventions similar to that described in the patent-in-suit, including a previous Walhonde patent, a Russian invention, and a patent issued by the United Kingdom. All of the devices

¹The complaint variously alleged direct, contributory and induced infringement, as well as tort claims not relevant to this order.

MEMORANDUM OPINION AND ORDER CONSTRUING PATENT CLAIMS

consist of two clamp members which are moved towards each other to secure the tube sections. Some of the prior art includes clamps secured by a combination of hinges and bolts, while others, including the patent-in-suit, utilize a bolt-only arrangement.

II. LEGAL STANDARD

In the ritualized realm of patent law, claim construction arises not from logic or common sense, but from the artificial requirements placed on inventors by the patent laws and the jurisprudence that has developed regarding both prosecution and infringement. Nevertheless, the Court must begin with the presumption that a claim term, where possible, must be interpreted according to its "ordinary and customary meaning" as it would be understood by a "person of ordinary skill in the art in question at the time of the invention." Phillips v. AWH Corp., 415 F.3d 1303, 1312-13 (Fed. Cir. 2005) (quoting Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996)). "[T]he person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification." Id. at 1313. In addition to the claims and specification, evidence intrinsic to the patent is deemed to include the prosecution history - the correspondence, office

MEMORANDUM OPINION AND ORDER CONSTRUING PATENT CLAIMS

actions, amendments and other communications between the Patent and Trademark Office and a patent applicant. Astrazeneca LP v. Apotex, Inc., __ F.3d. __, 2010 WL 4286284, 9 (Fed. Cir. Nov. 1, 2010). A court may also consider extrinsic evidence, including expert testimony, dictionaries, and the like, although such sources are generally considered "less reliable" than the intrinsic sources of the claims, specifications, and prosecution history. Id. (quoting Phillips AWH, 415 F.3d at 1318).

A. Person of Ordinary Skill in the Art

The defendants assert that the person of ordinary skill in the field of boiler wall tube tools at the time of the filing of the application for the '500 patent would have had either a bachelor's degree in a mechanical field and at least two years of experience in boiler design, or no such degree but five years of similar work experience. Walhonde would demand a more experienced person, with either an engineering degree and five years of power plant experience, or no degree but ten years of experience as a boilermaker.

To construct this hypothetical person, the Court considers the following factors: "(1) the educational level of the inventor; (2) type of problems encountered in the art; (3) prior art solutions to those problems; (4) rapidity with which innovations are made; (5)

MEMORANDUM OPINION AND ORDER CONSTRUING PATENT CLAIMS

sophistication of the technology; and (6) educational level of active workers in the field.” Daiichi Sankyo Co., Ltd. v. Apotex, Inc., 501 F.3d 1254, 1255 (Fed. Cir. 2007) (quoting Envtl. Designs, Ltd. v. Union Oil Co., 713 F.2d 693, 696 (Fed. Cir. 1983)) (internal citations omitted). These factors are “not exhaustive but merely are a guide.” Id.

The parties did not indicate the educational or experiential qualifications of the actual inventor of the '500 patent. Nor have they proffered whether many boilermakers possess engineering or related degrees. However, all agree that the requisite skill level could be attained through either a combination of formal education and on-the-job experience or work in the field alone. They differ solely on the length of experience required to attain a level of ordinary skill.

The problem to which the tool in question is addressed is not a technologically complicated one. Securing pieces of tube for welding is a fairly straightforward proposition. Additionally, the prior art includes devices similar to the tool described in the patent-in-suit. The Court therefore concludes that, given the nature of the invention and its field of use, the defendants have reasonably set forth a hypothetical person of ordinary skill in the art. An engineering or related degree and at least two years of

MEMORANDUM OPINION AND ORDER CONSTRUING PATENT CLAIMS

specialized experience in boiler wall construction, or five years of such work without a degree, would sufficiently familiarize a boilermaker with the problems and solutions related to the welding of boiler wall tubes. The additional experience Walhonde would demand would be unnecessary to a competent understanding of the relevant art.

B. Analysis of Disputed Terms

Walhonde contends that all or nearly all of the terms of the patent-in-suit have an unambiguous, plain-language meaning, and thus there is no need for substantial claim construction. In contrast, the defendants, in combination, have offered proposed constructions for nearly every word of the relevant patent claims.

The Court concludes that most of the terms of the '500 patent do not require specialized construction. However, certain elements must be more accurately defined to demarcate the scope of the claims; those terms are construed in this Order. To the extent a term is not addressed in this Order, the Court has concluded that the plain language of the patent shall control.

1. "boiler tube" and "adjacent ends of a boiler tube"

Defendant Wilson Works, Inc. ("Wilson") argues that the phrase "adjacent ends of a boiler tube" refers to a single tube having two ends that are close to each other, and that a boiler tube is a

MEMORANDUM OPINION AND ORDER CONSTRUING PATENT CLAIMS

"single, continuous" tube. Further, it argues that this is nonsensical, as the ends of a straight tube are necessarily remote and not adjacent, and thus the claim is invalid. Walhonde responds that it is obvious from the context of the patent that the phrase refers to two sections of tube with their ends near each other - those ends are then welded together to form a single tube.

Wilson points out that the Patent Office Examiner rejected similar language during prosecution of U.S. Patent No. 5,481,793 ("the '793 patent") by the same inventor of the '500 patent. In that case, the inventor amended his claims to refer to adjacent segments of a boiler tube. Of course, it is notable that the Patent and Trademark Office accepted the '500 patent as written, generating a presumption of validity. 35 U.S.C. § 282.

Even a cursory review of the patent in its entirety clearly shows that a person of ordinary skill in the art would understand the phrase "adjacent ends of a boiler wall tube" refers to the ends of the sections of pipe which are welded together to form the finished tube. Although somewhat inartfully drafted, the language, in combination with the specifications and a boilermaker's experience, would be sufficient to explain the invention's function and that the term referred to ends of tube sections.

MEMORANDUM OPINION AND ORDER CONSTRUING PATENT CLAIMS

In Astrazeneca LP, 2010 WL 4286284 at *8, the Federal Circuit upheld a district court order that, utilizing the view of a person of ordinary skill in the art, construed the term "budesonide composition" in a pharmaceutical patent as meaning "budesonide dispersed in a solvent in the form of a solution or suspension." The circuit court looked to the specification of the patent at issue, including the summary of the invention, to determine the meaning of the term. "[T]he specification 'is always highly relevant to the claim construction analysis. Usually, it is dispositive[.]'" Phillips AWH, 415 F.3d at 1315 (quoting Vitronics Corp., 90 F.3d at 1582).

In this case the Court may look to the text and drawings of the specification and easily discern that the "ends" referred to are of segments of boiler wall tube to be welded in place. For instance, in the "Brief Description of the Drawings" of the '500 patent, the inventor refers to Figure 3 as "a perspective view of an embodiment of the tool for clamping engagement with a single boiler wall tube." Col. 2, lines 21-23. Figure 3 shows the clamp engaging two ends of boiler tube segments, with their juncture exposed by means of a recess in the front clamp member.

MEMORANDUM OPINION AND ORDER CONSTRUING PATENT CLAIMS

The record establishes that any boilermaker would understand that boiler tubes are assembled from pieces or sections of pipe.² For instance, the prior American, British and Russian patents, as well as those issued to the inventor of the '500 patent, are all addressed to the problem of constructing boiler tubes by welding sections of pipe. A person of ordinary skill in the art would clearly understand the function of the invention, and specifically understand that the phrase "adjacent ends of a boiler tube" referred to the ends of those sections requiring a weld. Thus, the Court construes the phrase "adjacent ends of a boiler tube" to mean "adjacent ends of segments of a boiler tube."

The Court concludes that, to a person of ordinary skill in the art, the term "boiler tube" as used in the '500 patent means a tube that may be constructed from shorter segments welded together. Again, the specification refers to the two segments joined by the clamp in Figure 3 as a "single boiler wall tube," and the drawing makes clear that the tube consists of multiple segments. The word

²The Court is not persuaded by the affidavit of Jeff Kiley, a boilermaker, submitted by the defendants (dkt. 151-1), in which Kiley states that he "understand[s] a 'boiler wall tube' to mean a single, continuous tube." To be sure, once it is installed, a boiler tube is a single pipe. But the prior art makes it abundantly clear that in their construction, tubes are necessarily composed of multiple segments.

MEMORANDUM OPINION AND ORDER CONSTRUING PATENT CLAIMS

"single" at col. 2, lines 21-23, distinguishes this embodiment from the version of the invention (shown in Figures 1 and 2) that holds two boiler wall tubes (that is, four segments of tube). It does not, as the defendants assert, mean that the tube is at all times a continuous, unbroken unit.

2. "means providing access to the periphery of the juncture between the ends of the tube"

The parties agree that this is a "means plus function" term under 35 U.S.C. § 112(b), and, as such, is valid only if a structure that accomplishes the function is described in the specification. JVW Enterprises, Inc. v. Interact Accessories, Inc., 424 F.3d 1324, 1330 (Fed. Cir. 2005). Wilson contends that no such structure is disclosed, but Walhonde, as well as another defendant, Minnotte Contracting Corporation ("Minotte"), in its claim construction chart, assert that the corresponding structure is simply the opening or recesses in the clamp members that allow for a section of the juncture to be welded. See, e.g., '500 patent at Col. 3, lines 23-33; Fig. 2.

The Court agrees that this structure is apparent in the specification and accomplishes the function described in this claim. It further agrees that no specialized construction is necessary for this term, for, contrary to Wilson's constrained

MEMORANDUM OPINION AND ORDER CONSTRUING PATENT CLAIMS

suggestion, "periphery" has a plain-language meaning in the context of the '500 patent and the relevant art. Wilson urges the Court to construe "periphery" to mean "the perimeter of a closed curve." Walhonde responds that the term simply means "area."

In the context of the patent, "periphery" refers to the area, made accessible by the clamp's recesses, where the adjacent ends of the boiler tube sections join (the "juncture"). Because some portion of the juncture is covered by the clamp members when in use, the patent properly directs the reader to that portion which is exposed. The Court concludes that "periphery" simply means "area." Neither this, nor "juncture" (meaning a point of connection) require any specialized construction.

3. "bolt means connecting said clamp members . . . said bolt means including a headed bolt having a threaded end portion"

Another "means plus function" term, the structure disclosed here is shown in the specification as a bolt "threaded throughout its length," according to Wilson, although that language doesn't appear in the patent text. Walhonde contends that "having a threaded end portion" implies that some portion of the bolt may not be threaded. Walhonde is correct in stating that this term's corresponding structure has a plain meaning: simply "a threaded bolt;" however, to give effect to each word of the claim, the Court

MEMORANDUM OPINION AND ORDER CONSTRUING PATENT CLAIMS

construes the structure to consist of a bolt having both a head and at least some portion that is threaded. To adopt Wilson's proposed construction would at best ignore the word "portion" in the claim term, and more accurately it would contradict the implication of the inventor's use of that word: that some other portion of the bolt may not be threaded.

4. "one of said clamp members having a threaded bore extending therethrough"

The parties dispute whether this language, specifically "therethrough," means that the bore for receiving the bolt must extend all the way through the clamp member, or merely into it, and whether the entirety of the bore must be threaded. The prior art (including the UK patent with an integral nut to receive the bolt) supports Wilson's contention that this claim requires the bore to pass all the way through the clamp member, and is consistent with the plain meaning of the admittedly archaic word "therethrough." As with the threaded bolt, however, it is not strictly necessary that a "threaded bore" be threaded entirely. Thus the Court construes this term to mean "a bore extending through the entirety of one clamp member, of which bore at least a portion is threaded."

MEMORANDUM OPINION AND ORDER CONSTRUING PATENT CLAIMS

5. "single bolt" and "pair of bolts"

Wilson asserts that these terms should be defined as "one and no more than one bolt" and "two and no more than two bolts," respectively. Walhonde objects that the words "single" and "pair" are unambiguous and require no claim construction. Furthermore, Walhonde argues that the requirement of a "single bolt" (Claim 1) or "pair of bolts" (Claim 4) in the center of the clamp apparatus (between the pipe sections held in place on the version of the invention that allows two sets of boiler tubes to be clamped at once) does not preclude the placement of additional bolts elsewhere on the device. In Claim 1 of the '500 patent, the inventor claims "bolt means including a single bolt extending centrally through said clamp members," which Walhonde argues does not limit the claim to exclude devices having additional bolts in other locations. Similar language in Claim 4 only requires that the device have a pair of bolts located in the center of the clamp.

Both parties are correct. The words "single" and "pair," as used in the context of the claims, do imply exactly one and two bolts located in the center of the clamp. This does not mean, however, that other bolts might not appear in various locations on the device. Therefore, the construction proposed by Wilson does not substantively change the plain-meaning definitions urged by

MEMORANDUM OPINION AND ORDER CONSTRUING PATENT CLAIMS

Walhonde. The language requires no specialized construction. "Single" and "pair" simply mean "one" and "two" respectively, given that these are the commonly understood, plain English meanings of the words. See Phillips AWH, 415 F.3d at 1314.

6. "means moving the clamp members towards each other for secure clamping"

The parties dispute whether this term is a "means plus function" term subject to Section 112(b) analysis and thus limited by the specification. Walhonde contends that the structure is set forth explicitly in the claim and should be read as a "bolt assembly." Wilson, on the other hand, correctly notes that the word "means" in a patent claim creates a presumption that the term is stated under 112(b), and argues that no corresponding structure is adequately disclosed in the specification, thus rendering the claim invalid.

Minotte, in its claim construction chart (dkt. 134-1, 2-3), agrees with Wilson that the term is a "means plus function" phrase but recognizes that the specification adequately describes both the feature and its function. See '500 patent, col. 3, lines 33-40. Again, the Court need not at this time address issues of validity. It is sufficient to state that none of the words of this term requires a specialized construction. To a person with engineering

MEMORANDUM OPINION AND ORDER CONSTRUING PATENT CLAIMS

or boilermaker experience, the concept of a bolt which is turned to move clamp members towards or away from each other, in order to secure an object in the middle, is elementary.

CONCLUSION

For the reasons stated in this Order, the Court concludes that only the terms above require a specialized construction. All other terms of the claims have unambiguous plain language meanings. The claims construed in this Order shall govern the future proceedings in this case unless further modified by the Court.

It is so **ORDERED**.

The Court directs the Clerk to transmit copies of this Order to counsel of record.

DATED: February 3, 2011.

/s/ Irene M. Keeley
IRENE M. KEELEY
UNITED STATES DISTRICT JUDGE